A STUDY ON THE PERCEPTIONS OF TEACHER EDUCATORS TOWARDS THE APPLICATION OF COMPUTERS IN TEACHING LEARNING PROCESS

By

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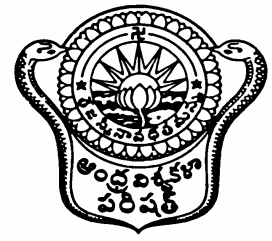

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Introduction:

Computer Education has been a compulsory subject in the teacher education programme to equip the teacher educators with the fundamental aspects of Information and communication technology and for using computer as an associate in the classroom at the same time in helping the teachers to equip themselves with the skill of using computers for ICT oriented activities.

The impact of the programme had been monitored by the performance of the student teachers by their performance in both theory and practical components. Due to the over loaded programme of teacher education in the recent past and due to the shortage of time for implementing ICT oriented teaching practice in colleges of education, there is a great need to find out the Impact of Computer Education in Teacher Education Programme in colleges of education. Previous investigations in the field of education dealing with the application of computers in the teaching learning process were limited in number with teacher educators working in college of education. Hence an attempt is made by the investigator to study the perceptions of teacher educators towards application of Computers in Teaching Learning Process.

Rationale of the study:

Computer Education has become a compulsory subject in Teacher Education and both teacher educators and student teachers started using computer education in all areas of teacher education. During the use of computers in teacher education, it is observed that both from the context of facilities, awareness, skill, applications and evaluation the teacher educators always felt sensitive in integrating the computer education. Hence it is felt that this study on perceptions on the application of computer education in teacher education is taken up.

Statement of the Problem

Considering the importance of computers in the teaching learning process and related aspects, the present investigation focuses on *'Perceptions of Teacher Educators towards Application of Computers in Teaching Learning Process'.*

Objectives of the Study

The present study was undertaken with the following objectives.

1. To study the perceptions of teacher educators towards application of Computers in Teaching Learning Process.
2. To study the relationship between various aspects of Teaching Learning Process on the application computes.
3. To study the influence of various variables like District in which college is situated, Designation of the Teacher Educator, Gender, Age, Locality, Management of the College, Subject of

teaching, Educational Qualification, Teaching experience, etc. on the perceptions towards application of Computers in Teaching Learning Process.

Hypotheses of the study

1. There will be no significant relationship between Presentation Facilities, Computer Awareness, Computer Operational Skills, Internet Applications, Computer Based Evaluation and overall response towards application of Computers in Teaching Learning Process.
2. There will be no significant difference between Krishna, Guntur and Prakasam districts of teacher educators perceptions in the aspects of Presentation Facilities, Computer Awareness, Computer Operational Skills, Internet Applications, Computer Based Evaluation and overall response towards application of Computers in Teaching Learning Process.
3. There will be no significant difference between male and female teacher educators perceptions in the aspects of Presentation Facilities, Computer Awareness, Computer Operational Skills, Internet Applications, Computer Based Evaluation and overall response towards application of Computers in Teaching Learning Process.
4. There will be no significant difference between below 35, between 35 to 45 and above 45 age group teacher educators perceptions in the aspects of Presentation Facilities, Computer Awareness,

Computer Operational Skills, Internet Applications, Computer Based Evaluation and overall response towards application of Computers in Teaching Learning Process.

5. There will be no significant difference between rural, urban and semi-urban area teacher educators perceptions in the aspects of Presentation Facilities, Computer Awareness, Computer Operational Skills, Internet Applications, Computer Based Evaluation and overall response towards application of Computers in Teaching Learning Process.
6. There will be no significant difference between Principal and teacher educators perceptions in the aspects of Presentation Facilities, Computer Awareness, Computer Operational Skills, Internet Applications, Computer Based Evaluation and overall response towards application of Computers in Teaching Learning Process.
7. There will be no significant difference among teacher educators perceptions based on their teaching experience in the aspects of Presentation Facilities, Computer Awareness, Computer Operational Skills, Internet Applications, Computer Based Evaluation and overall response towards application of Computers in Teaching Learning Process.
8. There will be no significant difference between M.Sc., M.Ed., and M.A., M.Ed., qualified teacher educators perceptions in the aspects of Presentation Facilities, Computer Awareness,

Computer Operational Skills, Internet Applications, Computer Based Evaluation and overall response towards application of Computers in Teaching Learning Process.

9. There will be no significant difference among teacher educators perceptions based on their teaching subject in the aspects of Presentation Facilities, Computer Awareness, Computer Operational Skills, Internet Applications, Computer Based Evaluation and overall response towards application of Computers in Teaching Learning Process.

10. There will be no significant difference between Government and Private B.Ed., college teacher educators perceptions in the aspects of Presentation Facilities, Computer Awareness, Computer Operational Skills, Internet Applications, Computer Based Evaluation and overall response towards application of Computers in Teaching Learning Process.

Variables of the Study :

The following variables incorporated in the sample drawn from the teacher educators for the present investigation as:

1.	District	:	Krishna / Guntur / Prakasam
2.	Gender	:	Male / Female
3.	Age	:	Below 35 Yrs/ 35-45 Yrs/above 45 Yrs
4.	Locality	:	Rural / Urban / Semi-Urban
5.	Designation	:	Principal / Teacher Educator
6.	Teaching Experience in years	:	Below 5 / 6 – 10 / 11 – 15 / 16 – 20 / Above 20 years.
7.	Educational Qualifications	:	M.Sc. M.Ed., / M.A. M.Ed.
8.	Subject Teaching	:	Telugu / English / Mathematics / Physical Science / Biological Science / Social Studies / Foundations of Education / Educational Psychology / Educational Technology and Computer Education / School Management and Systems of Education / Personality Development and Communicative English
9.	Management	:	Government / Private

Delimitations of the study:

The researcher limited her study to know the perceptions of teacher educators towards the application of computers in the teaching learning process. Further, the study is also delimited to collect data from the teacher educators working in colleges of education for secondary teacher trainees covering rural, urban and semi-urban localities of Krishna, Guntur and Prakasam Districts of Andhra Pradesh state.

Research Tool:

The instruments that are employed to gather new facts or to explore new fields are called as 'tools'. It is of vital importance to select suitable instruments or tools. Different tools are suitable for selecting different types of data. The investigator may use any one or more of the tools in combination for this purpose, there are two types of tools called standardized tool and tool prepared by the investigator.

Since the present investigation is related to the collection of information from the opinions of the teacher educators regarding application of computers in Teaching, Learning and Evaluation Process in Colleges of Education, an 'opinionnaire' was constructed and administered and to find out the perceptions of teacher educators towards the application of Computers in Teaching Learning Process.

Opinionnaire for Teacher Educators

The opinionnaire was constructed for the teacher educators to find out the perceptions of teacher educators towards the application of computers in teaching learning process. The tool was prepared to find out the preliminary information about the application of Computers in Teaching Learning Process in the aspects of Presentation Facilities, Computer Awareness, Computer Operational Skills, Internet Applications, Computer Based Evaluation and overall response towards on the Application of Computers in Teaching Learning Process.

Construction of the tool:

The present investigation is intended to study the perceptions of teacher educators towards the application of Computers in Teaching Learning Process. After going through various previous investigations and research articles in journals and periodicals and some of the research papers published on the subject matter, the investigator has taken the present research problem on the perceptions of teacher educators towards the application of Computers in Teaching Learning Process. The investigator had developed and adopted the tool as given in the annexure - I to collect the opinions of teacher educators.

Data Collection:

Data is collected by the survey method through census method. In the sample method the information is obtained only from a part of the population and based on this inference is drawn for the entire population. Sampling is thus a study of the part of the rural, urban and semi-urban areas of Andhra Pradesh.

The investigator adopted a simple random sampling technique to identify the Colleges of Education and teacher educators for collecting the data. Colleges of Education were selected on the basis of simple random sampling procedure. From a total of 78 Colleges of Education in Krishna, Guntur and Prakasam districts of Andhra Pradesh. Above from 40 Colleges of Education were randomly selected. 15 Colleges of Education out of 22 from the Krishna district; 15 Colleges of Education out of 33 from Guntur, 10 colleges of education out of 20 from Prkasam district of Andhra Pradesh.

Teacher educators were selected five in number in each college on the step wise simple random sampling technique. All together 200 teacher educators from 40 Colleges of Education in 3 districts of Andhra Pradesh were randomly selected for the study.

Statistical Techniques Used:

As the present study is of more of qualitative in nature, collected data were analyzed using both qualitative and quantitative techniques. Quantitative data were analyzed with the simple statistical techniques. The investigation has been carried out by the descriptive statistical analysis, such as calculating measures of central tendency like Mean and calculating measures of dispersion like Standard Deviation. For testing the null hypotheses, the 't' - test and Analysis of Variance have been used by the investigator. The 't'-test was used to test the null hypotheses when the data was correlated from matched groups. Analysis of (ANOVA) variance with Scheffe's Post Hoc Test (if ANOVA is significant) was used to find out the effect, if any, of the variables studied. The data were coded and prepared for analysis using the Statistical Package for Social Sciences (SPSS).

Major Findings:

1. The teacher educators had shown positive response in the aspects of Presentation Facilities, Computer Awareness, Computer Operational Skills, Internet Applications, Computer Based Evaluation and overall response towards the Application of Computers in Teaching Learning Process.

2. There is a significant correlation between all areas of Presentation Facilities, Computer Awareness, Computer Operational Skills, Internet Applications, Computer Based Evaluation and overall response towards the Application of Computers in Teaching Learning Process.
3. There is a significant difference among teacher educators perceptions based on their district with respect to Presentation Facilities, Internet Applications, Computer Based Evaluation and overall response towards the Application of Computers in Teaching Learning Process.
4. There is no significant difference among teacher educators perceptions based on their district with respect to Presentation Computer Awareness and Computer Operational Skills towards the Application of Computers in Teaching Learning Process.
5. There is a significant difference between male and female teacher educators perceptions with respect to Presentation Facilities, Computer Operational Skills, Internet Applications and overall response towards the Application of Computers in Teaching Learning Process.
6. There is no significant difference between male and female teacher educators perceptions with respect to Computer Awareness, Computer Based Evaluation towards the Application of Computers in Teaching Learning Process.

7. There is no significant difference among teacher educators perceptions based on their age group with respect to Presentation Facilities, Computer Awareness, Computer Operational Skills, Internet Applications, Computer Based Evaluation and overall response towards the Application of Computers in Teaching Learning Process.
8. There is a significant difference among teacher educators perceptions based on their location with respect to Computer Awareness, Computer Operational Skills, Internet Applications, Computer Based Evaluation and overall response towards the Application of Computers in Teaching Learning Process.
9. There is no significant difference among teacher educators perceptions based on their location with respect to Presentation Facilities towards the Application of Computers in Teaching Learning Process.
10. There is no significant difference between Lecturers and Principals perceptions teacher educators perceptions with respect to Presentation Facilities, Computer Awareness, Computer Operational Skills, Internet Applications, Computer Based Evaluation and overall response towards the Application of Computers in Teaching Learning Process.
11. There is no significant difference among teacher educators perceptions based on their teaching experience with respect to Presentation Facilities, Computer Awareness, Computer

Operational Skills, Internet Applications, Computer Based Evaluation and overall response towards the Application of Computers in Teaching Learning Process.

12. There is a significant difference between M.Sc., M.Ed., and M.A., M.Ed., qualified teacher educators perceptions with respect to Presentation Facilities, Computer Awareness, Computer Operational Skills, Internet Applications, Computer Based Evaluation and overall response towards the Application of Computers in Teaching Learning Process.

13. There is no significant difference among teacher educators perceptions based on their teaching subject with respect to Presentation Facilities, Computer Operational Skills and Computer Based Evaluation towards the Application of Computers in Teaching Learning Process.

14. There is a significant difference among teacher educators perceptions based on their teaching subject with respect to Computer Awareness, Internet Applications, and overall response towards the Application of Computers in Teaching Learning Process.

15. There is a significant difference between Government and Private college teacher educators perceptions with respect to Presentation Facilities towards the Application of Computers in Teaching Learning Process.

16. There is no significant difference between Government and Private college teacher educators perceptions with respect to Computer Awareness, Computer Operational Skills, Internet Applications, Computer Based Evaluation and overall response towards the Application of Computers in Teaching Learning Process.